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| APPLICATION NO. | FILING DATE                      | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|-----------------|----------------------------------|----------------------|---------------------|-----------------|
| 09/964,796      | 09/28/2001                       | Maximilian Angel     | 0050/51796          | 2868            |
| 26474           | 7590 12/19/2003                  |                      | EXAMINER            |                 |
| KEIL & WEI      |                                  | REDDICK, MARIE L     |                     |                 |
|                 | CTICUT AVENUE, N.W. DN. DC 20036 | ART UNIT             | PAPER NUMBER        |                 |
|                 | ,                                |                      | 1713                |                 |

DATE MAILED: 12/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| `  |   | Ар   | plication No.  | Applicant(s)   | 40                                    |
|--|---|--|--|--|---------------------------------------|
| Office Action Summary  |   | 09   | /964,796   | ANGEL ET AL.   |                                       |
|  |   | Exa  | aminer   | Art Unit   |                                       |
|  |   |  | dy M. Reddick  | 1713   |                                       |
| Period fo  | The MAILING DATE of this commu<br>or Reply  | nication appears   | on the cover sheet \   | vith the correspondence addr   | 9SS                                   |
| THE I<br>- Exte<br>after<br>- If the<br>- If NC<br>- Failu<br>- Any  | ORTENED STATUTORY PERIOD MAILING DATE OF THIS COMMUN nsions of time may be available under the provision SIX (6) MONTHS from the mailing date of this cone period for reply specified above is less than thirty period for reply is specified above, the maximum are to reply within the set or extended period for repreply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b).  | NICATION. as of 37 CFR 1.136(a). amunication. (30) days, a reply within statutory period will app ly will, by statute, cause   | In no event, however, may a<br>the statutory minimum of the<br>bly and will expire SIX (6) MG<br>the application to become   | n reply be timely filed<br>irty (30) days will be considered timely.<br>NNTHS from the mailing date of this comi<br>ABANDONED (35 U.S.C. § 133).             | nunication.                           |
| 1)   | Responsive to communication(s) fi   | led on <u>25 Noven</u>   | <u>nber 2003</u> .   |  |                                       |
| 2a) <u></u> ☐  | This action is FINAL.   | 2b)⊠ This actio  | n is non-final.  |  |                                       |
| 3)[  | Since this application is in condition closed in accordance with the practice.  |  |  |  | nerits is                             |
| Dispositi  | ion of Claims   |  |  |  |                                       |
| 5)□<br>6)⊠   | Claim(s) <u>1-8</u> is/are pending in the a 4a) Of the above claim(s) is/Claim(s) is/are allowed. Claim(s) <u>1-8</u> is/are rejected. Claim(s) <u>1</u> is/are objected to. Claim(s) are subject to restr  | are withdrawn fr   |  |  |                                       |
| Applicati  | ion Papers  |  |  |  |                                       |
| 10) <u> </u>   | The specification is objected to by to the drawing(s) filed on is/arc Applicant may not request that any objected Replacement drawing sheet(s) including the oath or declaration is objected under 35 U.S.C. §§ 119 and 120   | e: a) accepted<br>ection to the drawing the correction is  | ing(s) be held in abey:<br>required if the drawir  | ance.  See 37 CFR 1.85(a).<br>g(s) is objected to. See 37 CFR  |                                       |
|  | Acknowledgment is made of a clair   |  | ority under 35 U.S.C   | . § 119(a)-(d) or (f).   |                                       |
| * \$<br>13) \[ \textit{ A} \textit{ Si} \textit{ 3} \textit{ a} \textit{ a} \textit{ 14} \[ \textit{ A} \] | ☐ All b)☐ Some * c)☐ None of:  1.☐ Certified copies of the priorit  2.☐ Certified copies of the priorit  3.☐ Copies of the certified copies application from the Internation from Internati | y documents have y documents have sof the priority donal Bureau (PC on for a list of the for domestic priced in the first semanguage provision for domestic priced for domestic priced for domestic priced in the first semanguage provision for domestic priced in the first semanguage pri | ve been received in ocuments have been TRule 17.2(a)). e certified copies no ority under 35 U.S.Contence of the specificanal application has ority under 35 U.S.Conty | n received in this National Stat received.  S. § 119(e) (to a provisional a cation or in an Application Date to been received.  S. §§ 120 and/or 121 since a | pplication)<br>ata Sheet.<br>specific |
| Attachmen  | • /   |  |  |  |                                       |
| 2) 🔲 Notic   | e of References Cited (PTO-892)<br>e of Draftsperson's Patent Drawing Review (<br>mation Disclosure Statement(s) (PTO-1449)   |  | 5) Notice of   | Summary (PTO-413) Paper No(s).<br>Informal Patent Application (PTO-1   |                                       |

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#### **DETAILED ACTION**

### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/25/03 has been entered.

#### Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 3. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As far as the Examiner can tell, no support can be found for the limitation "wherein the content of hydroxy-C1-C6-alkyl(meth)acrylate in % by weight in a) is at least as large as the combined content of the compounds (A) and (B) in % by weight" per claim 1 and this, as such, without ironclad evidence from applicants as to where support might be found, engenders a New Matter situation. See page 6 @ lines 4-9 wherein the aforementioned phrase qualifies compounds of the formula (A) OR (B) and not (A) AND (B).

#### **Claim Objections**

4. Claim 1 is objected to because of the following informalities: In claim 1 @ line 12, it is suggested that applicants adopt the following: "wherein the content----in % by weight in a) is at

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least equal to" in lieu of the awkwardly expressed claim language "wherein the content----in % by weight in a) is at least as large as the combined content". Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1-8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Armour(U.S. 3,433,701, as applied to claims 1-6 and 8) or Bergmeister et al(U.S. 3,817,896, as applied to claims 1-8).

Armour discloses adhesive compositions, useful in the bonding, saturation or lamination of a variety of porous substrates such as wood and related products, and defined as containing a stabilized, aqueous vinyl acetate copolymer emulsion wherein, the stabilized vinyl acetate copolymer emulsion is produced via emulsion polymerizing vinyl acetate with at least one comonomer which includes hydroxyalkyl esters of alpha, beta-unsaturated carboxylic acids(in an amount of about 20 wt.%), in an aqueous medium and in the presence of a free-radical initiating catalyst and a hydrocolloid emulsifier, viz., polyvinyl alcohol, in a content of about 2 to 12 wt.%, based on the weight of total monomer charge. Armour discloses @ col. 3, lines 19-35 that the use of the polyvinyl

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alcohol, in the emulsion polymerization, serves to enhance the stability of the resulting emulsion. See, e.g., the Abstract, cols. 3-5, Runs I and II and the claims of Armour.

Bergmeister et al disclose stable, aqueous copolymer dispersions of ethylene and vinyl acetate governed by a solids content of up to 70 wt.%, useful in forming adhesives, paint binders, etc., prepared via aqueous emulsion polymerization in the presence of a redox catalyst, protective colloids and/or emulsifiers wherein up to 40 wt.% of the vinyl ester can be replaced with hydroxyalkyl esters and wherein the protective colloid, in an amount expressed per at least Run 1 falling within the scope of the claims, includes polyvinyl alcohol(see, e.g., the Abstract and cols. 5-6 of Bergmeister et al). More specifically, Bergmeister et al @ col. 5, lines 36-44 teach that the aqueous copolymer dispersions are suitable as binder adhesives, coating materials on a variety of substrates, soil improving agents, etc.

Each of Armour and Bergmeister et al therefore anticipate the instantly claimed invention with the understanding that the limitation "wherein the content of hydroxy-C1-C6-alkyl(meth)acrylate in % by weight in a) is at least as large as the combined content of the compounds (A) and (B) in % by weight" per claim 1 only qualifies the combination of (A) and (B) and not (A) or (B) individually and with the understanding that the components per each of Armour and Bergmeister et al overlap in scope with the components of the instantly claimed invention, in both content and character and that the "about 12 wt.% of polyvinyl alcohol per Armour is sufficient to meet the content of polyvinyl alcohol per the claimed invention since "about" is relative and not absolute. Even if this turns out not to be the case, it would have been obvious to the skilled artisan, following the guidelines of Armour @ col. 3, lines 19-35, to increase the content of polyvinyl alcohol(hydrocolloid emulsifier) and with a reasonable expectation of success. Further, the use of the compositions of Armour and Bergmeister in the coating of a pharmaceutical dosage form is tenable since the composition of each of Armour and Bergmeister et al is essentially the same as and made under essentially the same conditions as the claimed copolymer.

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As to the dependent claims, the limitations are either taught by Armour and Bergmeister et al, suggested by Armour and Bergmeister et al or would have been obvious to the skilled artisan and with a reasonable expectation of success.

As to the "consisting essentially of" clause, such limits the scope of a claim to the specified ingredients and to those that do not materially affect the basic and novel characteristics of a composition(Ex parte Davis, 80 USPQ 448 and In re Janakirama-Rao, 317 F 2d 951, 137 USPQ 893, CCPA 1963).

## Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Armour(U.S. 3,433,701).

The disclosure of Armour for what it teaches as applied to claims 1-6 and 8 and as stated in the Grounds of Rejection per paragraph 5 supra. Further, the disclosure of Armour differs basically from the claimed invention as per the amount of hydrocolloid emulsifier(polyvinyl alcohol) authorized is slightly less than the amount recited per the claimed invention. However, following the guidelines of Armour @ col. 3, lines 19-35, one having ordinary skill in the art would have found it obvious, on its face, to increase the amount of hydrocolloid emulsifier and with a reasonable expectation of enhancing the resulting emulsion stability. Moreover, it would have been prima facie obvious over Armour in view of the close proximity between the polyvinyl alcohol(protective colloid) content recited per the claimed invention and the hydrocolloid emulsifier content of Armour and the resulting expectation that the compositions would have the same or substantially the same properties as provided for under the guise of Titanium Metals Corp. v. Banner, 778 F.2d 775, 783, 227 USPQ 773, 779 (Fed. Cir. 1985). Criticality for such, clearly commensurate in scope with the claims, not having been demonstrated on this record.

# Response to Arguments

- 8. Applicant's arguments filed 11/25/03 have been fully considered but they are not persuasive.
- 9. Relative to the 112, 2<sup>nd</sup> paragraph issues---While Counsel, in a good faith effort, attempted to remedy the 112, 2<sup>nd</sup> paragraph issues raised in the previous Office Action(paper no. 3, 07/24/03), a new 112, first paragraph issue was created and is as set forth supra.

Relative to Armour et al– Counsel argues that Amour teaches that hydroxyalkyl esters should be present in amounts of up to 20% by weight of the copolymer and accordingly, Armour fails to teach this element. The claimed invention only requires 80 to 20 wt.% of a mixture of hydroxy-C1-C6-alkyl(meth)acrylate and at least one of (A) or (B) and not (A) + (B) and to this end,

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the aforementioned content of hydroxyalkyl ester of Armour et al clearly meets the claimed limitation.

Relative to Bergmeister et al—Counsel argues that Bergmeister teaches copolymerization of ethylene and vinyl acetate where up to 40% of the vinyl acetate present may be replaced with one or more comonomers, including hydroxyalkyl(meth)acrylates and in contrast to Bergmeister, the present invention requires hydroxyalkyl(meth)acrylates to be present in an amount at least equal to that of the compounds (A) and/or (B) and that the 60:40 ratio of Bergmeister does not teach this element of the invention and with all due respect to Counsel's opinion, the content of hydroxyalkyl(meth)acrylate per the claimed invention is not bound by the newly recited limitation as per reasons stated supra. To this end, the content of hydroxyalkyl(meth)acrylate per Bergmeister et al clearly overlaps in scope with the claimed content of hydroxyalkyl(meth)acrylate.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judy M. Reddick whose telephone number is (703)308-4346. The examiner can normally be reached on Monday-Friday, 6:30 a.m.-3:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703)308-2450. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-8183.

Jusy *J. Redduch* Judy M. Reddick Primary Examiner Art Unit 1713

JMR Jul 12/12/03